diagnosticated as appendicitis. By the same means, pneumonia occurring in meningitis, typhoid fever, or influenza has been detected at once.

In practice this sign is easily elicited. It suffices to expose the chest while the patient is in the dorsal position waiting until the agitation, which accompanies the first moments of examination, passes away and the breathing becomes regular. The difference of expansion on the two sides may then be readily observed. This may be better appreciated by passing the hand alternately over the two apices, or a stylet may be used to emphasize the difference in expansion on the two sides.

Duodenal Ulcer in an Infant of Ten Months.—VANDERPOEL ADRIANCE (*New York Academy of Medicine*, Séance, January 10, 1901; *Pediatrics*, July 15, 1901, p. 63) reported the case because of the very early age of the patient, a male infant in the Nursery and Child's Hospital. The family history was negative except that the mother was a hard drinker and irresponsible. On admission to the hospital the history was that the child had been very restless and had developed some gastro-intestinal symptoms. The condition became steadily worse, and the child cried constantly and placed his hands on the abdomen. After the first two weeks of rapid emaciation, and another fortnight in which the condition remained stationary, a relapse occurred, and about two pounds were lost in the week preceding death. Shortly before the end there were a number of bloody stools and some blood was vomited. At autopsy an ulcer was found in the duodenum, measuring 1 by 2 cm., which had nearly eaten through all the coats. The liver was excessively fatty.

The youngest case heretofore recorded was in a child, aged four years, the ulcer developing after a burn.

A Case of Subcutaneous General Emphysema.—W. L. CARR and SAMUEL PIERSON (New York Academy of Medicine, section on Pediatrics, Meeting May 9, 1901; in *Pediatrics*, October 15, 1901, p. 314) report a rare instance of this complication in a boy, aged four and a half years, suffering from pneumonia. For five days there were noted only the clinical symptoms of pneumonia, without detectable physical signs; from this until the tenth day the physical signs became clearly marked in the right lung, and then the other lung became affected. Five days later slight emphysema of the neck was noticed, and by the next day it had become general on the arms and trunk. Both lungs cleared up about this time, but the emphysema extended all over the body, gradually disappearing within the next three weeks. The child made a good recovery. The case is interesting from the fact that this complication is extremely rare with pneumonia; and with the lobar type, of which this was an instance, a general emphysema is almost without exception the forerunner of a fatal result.

Gangrene after Scarlatina and other Infectious Diseases.—EICHHORST (*Deutsches Archiv für klinische Medecin*, Bd. lxx., Hefte 5 u. 6) adds a new case of this very rare complication of scarlatina. The patient was a girl, aged four years, who had an unusually severe attack of scarlet fever. At the end of the third week symptoms of embolism of the left leg appeared suddenly, followed by dry gangrene, the line of demarcation finally forming about the middle of the leg. Examination of the bloodvessels after amputation showed evidence of endarteritis of the popliteal artery with a thrombus 1 cm. above its bifurcation, extending into both the anterior and posterior tibial arteries. Pure cultures of the streptococcus pyogenes were obtained from the pus of an otitis media and from a furuncle on the face.

According to the author's researches in the literature only two other cases of gangrene following scarlatina have been recorded. Both these occurred in children and involved both legs. In the course of this study 166 cases of gangrene following infectious diseases were collected, of which the greatest number followed typhus, 42; typhoid, 40; and influenza, 19. Of the rarer instances 10 were found following pneumonia, 5 after measles, 1 after varicella, and 1 after diphtheria.

Treatment of Adenoid Vegetations.—LAPEYRE (*Société de Pædiatrie*, Séance, October 8, 1901; *Revue Mensuelle des Maladies de l'Enfance*, November, 1901, p. 530) calls attention to the good effects he has secured in the treatment of adenoid vegetations by the internal administration of compound tincture of iodine. He commences with six drops three times a day, and gradually increases the dose, according to the age, until thirty to fifty drops are given. Despite these high doses he has never observed accidents. Atrophy and disappearance of the vegetations have been observed in a large number of cases.

The Use of Artificial Serum as a Means of Prognosis in Diphtheria.—In a series of observations covering the use of subcutaneous injections of artificial serum in infectious diseases, especially diphtheria, RABOT and BONNAMOUR (*Lyon Médical*, 1901, No. 34) have brought out the fact that the reaction of the patient to such injections may be taken as an almost infallible indication of the favorable or unfavorable outcome of the case. If, after the injection a prompt diuresis occurs, without vomiting or diarrhœa, the outcome of the disease will be benign, whatever the general state of the patient; if, on the contrary, after injection the quantity of urine is not increased, and vomiting or diarrhœa occur, the prognosis is fatal, even though the child may seem to be doing well at the time. In all the cases tested in this way by the authors the disease terminated in accordance with this law. Sometimes a first injection has indicated a bad prognosis, even when the child's general condition seemed excellent; but a second injection has given the same response, which did not fail soon to be confirmed. In illustration of the certainty of prognosis under these conditions, the authors detail a case of diphtheria in a child, who, even after the injection, passed scarcely 300 grammes of urine in twenty-four hours, and had frequent vomiting attacks. He was apparently in good condition, however, laughing and playing about the bed. Despite the employment of several diuretics, including theobromine and lactose, and the use of saline intestinal injections, the excretion of urine did not increase, and death occurred on the eleventh day.

Despite the certainty of prognosis thus early indicated, treatment should not be neglected. The serum test indicates the condition of the kidneys, and every effort should be made to favor the elimination of toxins. Diuretics should be employed, lactose in particular and lavements of salt solution. The general state and fever, if present, should receive attention. Further injections of artificial serum should be avoided, since they can only aggravate the conditions by producing an excessive increase of blood tension.

By observation of the reaction produced by subcutaneous injections of artificial serum, one may gain definite knowledge of the state of the heart and of the degree of infection, and thus may be established an almost certain prognosis in embarrassing cases, so frequent in the diseases of children, in which the general state does not correspond with the local, and *vice versa.*

A Simple Procedure for Increasing the Amount of Fat in Diluted and Sterilized Cow's Milk.—ROMANOFF (*Vratch,* September 1, 1901) suggests a method for accomplishing such a modification which does not seem to possess any advantage over our more accurate laboratory methods. Fresh milk is diluted with an equal part of oatmeal-water containing 4 per cent. of sugar. The mixture is poured into six bottles, sterilized in Soxhlet's apparatus for ten minutes, and then placed on ice for from two to three hours. The bottles are then carefully removed, without shaking, and the lower half of the milk in each bottle is siphoned off. The remaining milk is shaken, warmed, and given to the infant. This upper milk is said to show three or four times as much fat as the part removed by siphoning, being estimated at from 2.9 to 3.6 per cent.

[As this method makes no provision for varying modifications of the proteid percentage, which in this mixture must be constantly about 1.50 to 1.75 per cent., a percentage which many infants cannot digest in the earlier months of life, it would seem that the product offers little advantage over other mixtures of the same kind, excepting, perhaps, in previous sterilization (which may be undesirable), and in the fact that the emulsion of the fats is little disturbed (also a gain of little practical importance in most cases). The inflexibility of the sugar percentage is also another defect.—T. S. W.]

THERAPEUTICS.

UNDER THE CHARGE OF

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The Analgesic Antipyretics.—DR. G. POUCHET gives a valuable practical summary of the analgesic antipyretics, based on the relation of their physiological action to their chemical structure. He divides them into six groups, as follows: (1) *Quinoline group,* to which belong analgine, kairine,